

WHAT IS CLAIMED IS:

1. A method of operating an on-the-shelf inventory management system, the system having a current reporting period table
5 that has a number of rows, a number of columns, and a number of fields, each field having an initial value, the method including the steps of:
- collecting a plurality of transaction data blocks;
constructing a temporary table having a plurality of fields that
10 correspond with the current reporting period table, and processing the plurality of transaction data blocks to determine a calculated value for each field in the temporary table;
- adding each calculated value of a field in the temporary table to
an existing value in a corresponding field in the current reporting period
15 table; and
- determining, for each item in the current reporting period table, if an alert condition exists, and issuing an alert when an alert condition exists.
- 20 2. The method of claim 1 and further comprising the step of returning to the collecting step to collect a next plurality of transaction data blocks.
3. The method of claim 1 and further comprising the steps of:
25 initializing each field in the current reporting period table before the collecting step;
- determining if a current reporting period is over;
- when the current reporting period is not over, returning to the collecting step; and

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when the current reporting period is over, returning to the initializing step.

4. The method of claim 3 wherein a variable n is set to an initial value in the initializing step, and the plurality of transaction data blocks are collected every nth time period.

5. The method of claim 4 and further comprising the steps of:
determining if a number of transaction data blocks have been stored in an external memory;
copying the transaction data blocks from the external memory to an internal memory when the number of transaction data blocks have been stored in the external memory;
determining whether an nth time period has expired after the transaction data blocks have been copied, or when the number of transaction data blocks has not been stored in an external memory;
returning to the determining step when the nth time period has not expired; and
moving to the constructing temporary table step when the nth time period has expired.

6. The method of claim 5 and further comprising the step of incrementing the variable n after the determining, for each item step.

7. The method of claim 1 wherein the determining, for each item step includes the steps of:
outputting a database request to a database;
receiving a measurement number from the database;

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comparing the measurement number with an existing value in the current reporting table to form a difference value;

determining whether the difference value falls within a predetermined acceptance range; and

- 5 issuing an alert command when the difference value does not fall with the predetermined acceptance range.

8. The method of claim 7 and further comprising the steps of:
determining if more items remain to be compared after issuing
10 the alert command, or when the difference value does fall with the predetermined acceptance range; and
returning to the outputting step when more items remain to be compared.

- 15 9. The method of claim 7 and further comprising the steps of:
determining whether an alert command has been received, the alert command identifying an item;
when an alert command is received, determining whether the item identified by the alert command has been blocked;
20 when the item has not been blocked, issuing an alert.

10. The method of claim 9 wherein the alert includes a page.

11. The method of claim 9 wherein the alert includes an e-
25 mail.

12. The method of claim 9 and further comprising the step of adding an identifier and a time stamp to an alert log to record the alert.

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13. The method of claim 12 and further comprising the steps
of:

determining whether a response to an alert has been received;
when a response to an alert is received, identifying the sender,
5 determining a type of response, and adding a record to the alert log;
determining whether the response is of a predetermined type;
and
when the response is of the predetermined type, adding the item
that corresponds with the alert to a blocked log.

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14. The method of claim 13 wherein the predetermined type
includes an out-of-stock condition.

15. The method of claim 13 and further comprising the steps
15 of:

determining whether an alert has been received;
when an alert has been received, inspecting a shelf location that
corresponds with the item that corresponds with the alert;
selecting a descriptor to describe a condition of the shelf location;
20 transmit descriptor back to alert device; and
taking necessary corrective action.

16. The method of claim 1 and further comprising the steps of:
determining whether an alert has been received;
25 when an alert has been received, inspecting a shelf location that
corresponds with the item that corresponds with the alert;
selecting a descriptor to describe a condition of the shelf location;
transmitting the descriptor back to the alert device; and
taking necessary corrective action.

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17. A method of operating an on-the-shelf inventory management system, the system measuring a number of units of an item that has been sold, and outputting an alert when the number of
5 units of the item that has been sold falls below a statistical measure of a number of units that are expected to have been sold, the method including the steps of:

determining whether an alert has been received;
when an alert has been received, inspecting a shelf location that
10 corresponds with the item;
selecting a descriptor to describe a condition of the shelf location;
transmitting a descriptor back to the system.

18. The method of claim 17 and further comprising the step of
15 taking necessary corrective action.

19. An on-the-shelf inventory management system, the system having a current reporting period table that has a number of rows, a number of columns, and a number of fields, each field having an initial
20 value, the system comprising:

a computer having:
means for collecting a plurality of transaction data blocks;
means for constructing a temporary table having a plurality
of fields that correspond with the current reporting period table, and
25 processing the plurality of transaction data blocks to determine a calculated value for each field in the temporary table;
means for adding the calculated value for each field in the temporary table to an existing value in each corresponding field in the current reporting period table; and

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means for determining, for each item in the current reporting period table, if an alert condition exists, and issuing an alert when an alert condition exists.

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